

In the Claims:

1. (Currently amended) A scanning device for a position measuring system for scanning a scale graduation comprising:

a probe being operatively connected with the scale graduation ~~and being supplied with electric power over a plurality of electrical connections;~~

an electronic module being electrically coupled to the probe via conductor strips; the conductor strips supplying electric current to the probe;

a housing of the electronic module for shielding the electronic module from the surroundings, ~~with at least parts of the probe being placed completely outside the housing, and at least parts of the electrical connection of the conductor strips, leading from the electronic module to the probe,~~ being disposed outside the housing; and

means for limiting the supply of current to the probe, wherein at least one fuse is provided in the ~~electrical connections~~ conductor strips, leading from the electronic module to the probe, within the housing, for interrupting the flow of current to the probe when the temperature produced as a result of the current flow exceeds a specific value, wherein the at least one fuse is formed by a sectional constriction of ~~a cross section of the electrical connections and the electrical connections comprise the~~ conductor strips and wherein the housing of the electronic module further forms the housing of the at least one fuse.

2. (Previously canceled).

3. (Canceled).

4. (Canceled).

5. (Currently amended) The scanning device of claim 1, wherein a fuse is provided for each of ~~the electrical connections~~ the conductor strips extending partially outside of the housing.

6. (Previously canceled).

7. (Original) The scanning device of claim 1, wherein the housing comprises aluminum.

8. (Original) The scanning device of claim 1, wherein the probe scans the scale graduation according to at least one of the inductive principle of measurement, the magnetic principle of measurement and the photoelectric principle of measurement.

9. (Original) The scanning device of claim 8, wherein the probe is a magnetoresistive probe.